

What is claimed is:

- 1 1. A method comprising:
2 collecting data regarding a current association in a wireless network; and
3 storing the data for use in future association decisions.
- 1 2. The method of claim 1 wherein storing the data comprises storing data in
2 memory in a network interface.
- 1 3. The method of claim 1 wherein storing the data comprises storing data in
2 host memory.
- 1 4. The method of claim 1 wherein the data includes data throughput of the
2 current association.
- 1 5. The method of claim 1 wherein the data includes a duration of the current
2 association.
- 1 6. The method of claim 1 wherein the data includes a reason for disassociation
2 of the current association.
- 1 7. The method of claim 1 wherein the data includes a number of previous
2 associations.
- 1 8. The method of claim 1 wherein the method is performed at least in part by
2 software on a host system.
- 1 9. A method comprising:
2 accessing association history data for at least one access point in a wireless
3 network; and

4 selecting an access point based at least in part on the association history data.

1 10. The method of claim 9 wherein accessing association history data comprises
2 accessing host memory.

1 11. The method of claim 9 wherein accessing association history data comprises
2 accessing memory in a wireless network interface.

1 12. The method of claim 9 wherein accessing association history data comprises
2 accessing a duration of a last association.

1 13. The method of claim 9 wherein accessing association history data comprises
2 accessing a reason for disassociation.

1 14. The method of claim 9 wherein accessing association history data comprises
2 accessing an average throughput for past associations.

1 15. The method of claim 9 wherein accessing association history data comprises
2 accessing a number of previous associations.

1 16. The method of claim 9 wherein the method is performed at least in part by
2 software embedded in a wireless network interface.

1 17. The method of claim 9 wherein the method is performed at least in part by
2 software on a host system.

1 18. A method comprising:
2 collecting historical association data at a wireless network interface; and

3 passing the historical association data to a media access control layer
4 running in a software driver on a host system, to allow the data to be saved using
5 resources of the host system.

1 19. The method of claim 18 wherein accessing association history data
2 comprises accessing a duration of a last association.

1 20. The method of claim 18 wherein accessing association history data
2 comprises accessing a reason for disassociation.

1 21. The method of claim 18 wherein accessing association history data
2 comprises accessing an average throughput for past associations.

1 22. An apparatus including a medium adapted to hold machine-accessible
2 instructions that when accessed result in a machine performing:
3 accessing association history data for at least one access point in a wireless
4 network; and
5 selecting an access point based at least in part on the association history data.

1 23. The apparatus of claim 22 wherein accessing association history data
2 comprises accessing a duration of a last association.

1 24. The apparatus of claim 22 wherein accessing association history data
2 comprises accessing an average throughput for past associations.

1 25. An apparatus comprising:
2 a radio interface to interact with a wireless network, and
3 a processor coupled to the radio interface, wherein the processor is adapted
4 to maintain historical association data for at least one access point, and is further

5 adapted to make association decisions based at least in part on the historical
6 association data.

1 26. The apparatus of claim 25 wherein the processor is adapted to choose an
2 access point that has a history of a longer association duration for past associations.

1 27. The apparatus of claim 25 wherein the processor is adapted to choose an
2 access point that has a history of higher data throughput for past associations.

1 28. An electronic system comprising:
2 an omni-directional antenna;
3 a radio interface coupled to the omni-directional antenna to interact with a
4 wireless network, and
5 a processor coupled to the radio interface, wherein the processor is adapted
6 to maintain historical association data for at least one access point, and is further
7 adapted to make association decisions based at least in part on the historical
8 association data.

1 29. The electronic system of claim 28 wherein the processor is adapted to
2 choose an access point that has a history of a longer association duration for past
3 associations.

1 30. The electronic system of claim 28 wherein the processor is adapted to
2 choose an access point that has a history of higher data throughput for past
3 associations.